



MEMORANDUM

TO: Rick Crume, U.S. Environmental Protection Agency

FROM: Susan Radomski, Eastern Research Group

DATE: September 8, 1997

SUBJECT: Summary of September 3, 1997, Incinerator Work Group Meeting

1.0 INTRODUCTION AND PURPOSE OF MEETING

The September 3 meeting was the eleventh meeting of the Incinerator Work Group for the Industrial Combustion Coordinated Rulemaking (ICCR). The major goals of this meeting were to review and approve any presentations for the September Coordinating Committee meeting and prepare review materials for posting to the TTN; identify future tasks and develop a tentative schedule for the coming year; and identify database revisions, deletions and updates to assist EPA in completing the Inventory Database V3.

2.0 LOCATION AND DATE

This Work Group meeting was held from 9:00 am until 4:00 pm on September 3, 1997, at the Chemical Manufacturers Association in Washington, DC. A copy of the draft meeting agenda is included as attachment 1.

3.0 ATTENDERS

The Incinerator Work Group meeting was open to the public. Participants at the meeting included representatives of the EPA, industry, State and local governments, and the environmental community. A copy of the attendance list for the meeting is included as attachment 2.

4.0 DISCUSSION

After introductions, the Work Group received updates about the nominations for Work Group membership, as well as nominees for the positions of Stakeholder Co-chair and Alternate. Updates were also made on the ICCR Inventory Database, the ability of the EPA to fund testing and the progress of the Solid Waste Definition Subgroup. The Work Group then discussed the possibility of changing the Incinerator Work Group name, reviewed the draft table for potential subcategories and received guidance on developing a Regulatory Alternatives Paper (RAP). The Work Group also developed a schedule for the coming year and heard updates from some of the subteams. These topics are summarized in the sections that follow.

4.1 General Updates

The updates mentioned above were provided by Rick Crume of EPA and Jeff Shumaker of International Paper and were discussed by the Work Group. These discussions are summarized below.

4.1.1 Incinerator Work Group Stakeholder Co-chair and Alternate Nominations

Rick Crume reported that no nominations had been submitted for the positions of Incinerator Work Group Stakeholder Co-chair or Alternate. Norman Morrow of Exxon Chemicals America, the current Stakeholder Co-chair and Jeff Shumaker, the current Alternate, agreed that they would be willing to continue in their present duties. The Work Group agreed to request that EPA reappoint both members to their current positions for the coming year.

4.1.2 Status of Work Group Nominations

Rick Crume presented the names of people who have been nominated to the Work Group. The Work Group also reviewed the names of people who have requested that they be removed from the Work Group or remain on the Group with the understanding that their participation will be limited. A copy of this list of names is included as attachment 3.

The Work Group verified the nominations and expressed the opinion that more State and local representation would be beneficial to the Work Group. EPA suggested that the Work Group address the State and Local Caucus regarding these concerns. The Work Group also requested a report from EPA on the composition that was originally intended for the ICCR membership and what effect attrition has had on this composition. In response, EPA agreed to

address this issue during the Work Group discussion that is regularly scheduled during each Coordinating Committee meeting.

4.1.3 Database Update

Rick Crume mentioned that EPA has begun receiving updated information for the ICCR Inventory Database. He requested that any changes a Work Group member would like to submit be forwarded to him. Mr. Crume will review and evaluate the data and request any necessary clarification before forwarding the information to Eastern Research Group to be added to the Inventory Database.

4.1.4 EPA Ability to Fund Testing

Rick Crume reported that EPA's FY-98 budget is not yet in place. Therefore, EPA does not know how much funding will be available for ICCR-related emission testing. He reminded the Work Group of the FACA "leveraging of resources" concept, which means that stakeholders are expected to participate in data collection and analysis activities, possibly including stakeholder-conducted source testing. He also suggested that the Work Group bring recommendations for necessary testing to the Coordinating Committee.

4.1.5 Solid Waste Definition Subgroup Progress

Jeff Shumaker reported that the Solid Waste Definition Subgroup held a teleconference recently. During the call, the Subgroup accomplished two things. The first accomplishment was the scheduling of a series of meetings, the first of which was held on September 4. Second, the Subgroup organized an approach for developing a definition of solid waste. The chosen approach involves considering the materials in question rather than previous regulations. The Subgroup would like to determine what criteria make a material "fuel-like" as opposed to "waste-like" and draw up characteristics that distinguish between the two.

The support group for Incinerator Work Group members of the Solid Waste Definition Subgroup is also having informational calls. The next support group teleconference is scheduled for September 10 at 8:30am EDT.

4.2 Incinerator Work Group Name Change

Bob Morris of The Coastal Corporation discussed the possibility of changing the name of the Incinerator Work Group. He suggested that the current name implies that the scope of the

Work Group is far more narrow than it actually is. The name sometimes causes time to be wasted on discussion of whether a unit is an incinerator instead of concentrating on the more important question of whether a unit should be covered under ICCR.

After discussing several possible new Work Group names, such as “Waste Combustion Units” and “Incinerators and Gas Combustion”, no consensus was reached, and Work Group members interested in changing the name were encouraged to consider different names for the Work Group and present them at a future meeting.

4.3 Draft Table for Potential Subcategories

Rick Crume presented a draft table for potential subcategories. A copy of this table is included as attachment 4. The table is intended to be used by the subteams to develop subcategories and communicate their progress. The Work Group offered several suggestions for improving the current format and wording of the table. The recommended changes were incorporated into an updated table and distributed. Rick mentioned that the table will be used to lay the groundwork for future Work Group actions, and new columns may be added to the table as they are needed.

4.4 Regulatory Alternatives Paper Guidance

Rick Crume presented regulatory alternative paper guidance, which included the ICWI Consent Decree dates and definitions of ICWI and OSWI categories. A copy of the definitions is included as attachment 5. The Incinerator Work Group will prepare the RAP, present it to the Coordinating Committee, and make any recommended changes. The Coordinating Committee will then submit the RAP to EPA for EPA to use in writing the “white paper.”

Mr. Crume outlined the three items that EPA expects the Work Group to include in the RAP. These are:

- the subcategories included in the ICWI category
- any HAPs of concern for the category
- possible control alternatives.

The format for the RAP is open. Mr. Crume suggested that the RAP may be a 10-15 page memo and that it be completed by mid-summer, 1998. This deadline allows the Coordinating Committee enough time to review the RAP before submitting it to EPA.

A Work Group member requested that Mr. Crume provide a written summary of the RAP guidance.

4.5 Development of a Schedule for the Coming Year

Following Rick Crume's presentation of a list of representative Work Group responsibilities (attachment 6), Norman Morrow outlined the responsibilities of the Work Group for the coming year. He noted that the Work Group particularly needs to be working towards developing the RAP by the middle of summer, 1998.

It was agreed that the subteams need to develop subcategories and have a list ready for Coordinating Committee review by the November meeting. In order to meet this deadline, the Work Group scheduled an October 28 meeting to agree on the subcategories to be presented in November. Each subteam will provide draft subcategory information to Rick Crume by October 14. The draft will include the recommended subcategories, subcategory definitions, a rationale for the subcategory selection and the assigned Clean Air Act sections. A description of the units included in each subcategory and the waste burned should also be provided. Mr. Morrow reminded the Work Group that the goal of subcategorization is to provide as few subcategories as possible, while avoiding the placement of units into categories where they do not fit.

After presenting the recommended subcategories to the Coordinating Committee in November and acting on any suggestions from the Committee, the Work Group will identify data gaps and develop test plans and model plants. This work should be completed by March, at which time it may be presented to the Coordinating Committee. By June, the Work Group will determine emissions levels, MACT floors, and control options. Meeting this goal will allow the Work Group time to complete a Draft Regulatory Alternatives Paper to be presented to the Coordinating Committee by the July meeting.

A Work Group member suggested that, during the course of subcategorizing, a subteam may discover that it does not have the expertise necessary to meet the March or June goals. If the

expertise is not present, the subteam may need to recruit new Work Group members with the required knowledge.

A breakdown of the milestones agreed upon by the Work Group agreed is listed below:

October 14, 1997: Subteams provide draft subcategories and definitions.

November 18-19, 1997: Work Group presents subcategories to the Coordinating Committee.

March, 1998: Work Group identifies data gaps and develops test plans and model plants.

June, 1998: Work Group determines emission levels, MACT floors, and control options.

July, 1998: Work Group completes a Draft Regulatory Alternatives Paper.

4.6 Subteam Status Reports

At its March 11 meeting, the Incinerator Work Group formed subteams to examine the incinerators in the ICCR database in a line-by-line fashion. These subteams were tasked to check the quality and accuracy of data in the database and to group incinerators into potential subcategories for analysis and regulation development. At the September 3 meeting, each subteam met individually to review progress made since the last meeting and provided a progress report to the Work Group. Subteams 2 and 4 made scoping recommendations to the Coordinating Committee at the July Coordinating Committee meeting in Long Beach, California. For this reason, Subteams 1, 3 and 5 presented status reports first, with the understanding that Subteams 2 and 4 would speak if time allowed.

During the course of the reports, the issue of subteam database records, which could be better handled by a different subteam, was raised. The Work Group agreed that a mechanism was needed to facilitate the exchange of records between subteams. It was agreed that subteam leaders would be responsible for sending the Facility ID and Combustor ID of any records found to be outside the scope of their subteam to the subteam most likely to be handling the unit type in

question. A Work Group member suggested that a new database be developed that includes a new column in the original Incinerator Inventory Database. This column could show which subteam is handling each unit. However, Subteam 2 mentioned that, because their subteam worked from the complete Inventory Database, the units with which they are working may not correspond exactly to those in the Incinerator Inventory Database.

4.6.1 Subteam 5 Status Report

Subteam 5 is investigating fiberglass, concrete, and landfill gas incineration, as well as municipal and municipal-type waste combustion. The subteam is working with the Incinerator Inventory Database and the Incinerator Work Group Subcategorization Table to develop subcategories. A copy of the presentation material is available as attachment 7. Rick Crume explained the initial, tentative subcategorizations determined by the group. To begin with, the categories of Small Municipal Waste Combustors, Residential Waste and Miscellaneous Organic Waste have been tentatively combined. Another subteam suggested that the name of the Miscellaneous Organic Waste be changed because another category containing different unit types has been given that name.

The subteam has agreed that more data on Landfill Gas Flares are needed before a position paper may be completed and a presentation may be made on this topic. Efforts are being made to procure the required data. The units in the categories of Fiberglass, Concrete, and Sludge also require more information, since little is known about these combustors.

4.6.2 Subteam 3 Status Report

Dave Maddox of Stanley Furniture Company provided an update on the progress of Subteam 3. The materials distributed for this presentation are not available in electronic format. However, hard copies are available from the project docket. Mr. Maddox reported that the subteam has completed a review of the database. He provided a handout showing the work, such as identifying duplicates and misplaced units, completed by the subteam. As a result of the database review, the subteam believes that over 90% of the units identified in the database as incinerators, which primarily combust wood, are actually boilers. The subteam suggested that EPA verify the correct description of each combustor either by using the Information Collection Request (ICR) data or by contacting facilities directly. EPA responded that the ICR may not

provide the data, and the subteam research has already built a persuasive argument that the units in question are boilers and should be removed from the Incinerator Inventory Database. With these units removed from consideration, the remaining tentative categories are: wood, construction waste, and demolition waste.

Subteam 3 also recommended that actions regarding the classification of wood, paper, or wood-related products be deferred, pending the anticipated definition of solid waste by the Coordinating Committee Solid Waste Definition Subgroup. This suggestion is based on the possibility that the definition of solid waste may narrow the scope of interest, rendering previously completed work obsolete. A recommendation was also made that the regulatory decisions be based on data from the ICR, because the Inventory Database does not provide adequate data on wood incineration.

4.6.3 Subteam 1 Status Report

Paul Rahill of Industrial Equipment and Engineering Company gave the Subteam 1 status report. Because of changes made during the subteam huddle, the handout that had been prepared was no longer current. The subteam will update the paper outlining the subteam recommendations and make it available to the Work Group via the TTN. The subteam has completed an initial review of the database and gathered additional data from trade organizations. The subteam has also developed scoping recommendations.

The subteam recommended that the pharmaceutical subcategory be combined with another subcategory under Subteam 2 or 5. This move may be preferable because the number of pharmaceutical incinerators is too small to justify developing a unique subcategory for them. Another recommendation is that the crematory and pathological incinerators be combined into a single subcategory because of the similarities between the two.

5.0 ACTION ITEMS

The following action items are to be conducted by the next Work Group meeting:

- Rick Crume will evaluate any database updates presented by the Work Group and forward the updates to Eastern Research Group.

- Rick Crume will prepare a draft summary of Regulatory Alternatives Paper requirements. This summary will include an explanation of the distinction between ICWI and OSWI, a clarification of covered pollutants, and other clarifications.
- The EPA will inform the Work Group of the composition that was originally intended for ICCR membership and what effect attrition has had on this composition.
- Any movement of units between subteams should be handled by the Subteam leaders with a copy to Rick Crume. The facility ID and combustor ID must be provided to the subteam to which the misplaced units belong.
- A draft of the Incinerator Work Group Status Report to be presented to the Coordinating Committee will be prepared by Norm Morrow and Rick Crume. The Work Group will review the document in time to have it posted on the TTN for the Coordinating Committee meeting.

6.0 IMPORTANT DATES

The current Work Group meeting schedule and other important dates are:

- September 18: A room will be available for subteams interested in huddling in Durham, North Carolina (Note: The Coordinating Committee will meet in Durham on September 16 and 17.)
- September 22: Teleconference for all Work Group members to summarize the outcome of the September Coordinating Committee meeting; 11am - 1pm EDT
- October 9: Teleconference for subteam leaders and interested Work Group members to discuss progress made in preparing for the October 14 deadline, 11am - 1pm EDT
- October 14: Recommended subcategories, subcategory definitions, rationale for subcategory selection, and assigned Clean Air Act section due to Rick Crume

- October 28: Work Group meeting in Research Triangle Park, North Carolina, 8am - 4pm EST
- November 20: Work Group meeting scheduled for Houston, Texas (Note: the Coordinating Committee will meet on November 18 and 19)

These minutes represent an accurate description of matters discussed and conclusions reached and include a copy of all reports received, issued, or approved at the September 3, 1997 meeting of the Incinerator Work Group.

Rick Crume

ATTACHMENTS

Attachment 1: Draft Meeting Agenda

Attachment 2: Meeting Attenders

Attachment 3: List of Work Group Nominations

Attachment 4: Draft Table for Potential Subcategories

Attachment 5: ICWI/OSWI Category Definitions

Attachment 6: Items on Representative Incinerator Work Group Responsibilities for Planning Purposes

Attachment 7: Subteam 5 Subcategorization Table

ATTACHMENT 1

Draft Meeting Agenda

DRAFT AGENDA
INCINERATOR WORK GROUP MEETING
September 3, 1997; 9am-4pm EDT
Chemical Manufacturers Association
Washington, D.C.

MAJOR MEETING GOALS

- --
- Identify database revisions, deletions, and updates to assist EPA in completing Inventory Database V.3.
 - Review and approve any presentations for September 16, 17 CC meeting, and prepare to submit review materials to TTN.
 - Identify future tasks and develop a tentative schedule for the coming year.
- --

9:00-9:20am CONVENE (R. Crume)
 WELCOME AND INTRODUCTIONS (Facilitator)
 - Review of Meeting Goals and Agenda
 - Review of July 30 IWG Teleconference and action items (N. Morrow)

9:20-10:00am UPDATES
 - Nominations for Stakeholder Co-chair and Alternate (R. Crume)
 - Status of WG Nominations (R. Crume)
 - Database Update (T. Waddell)
 - EPA Ability to Fund Testing (R. Crume)
 - SW Definition Subgroup Progress (J. Shumaker)
 - Other Updates (Work Group member input)

10:00-10:10am IWG NAME CHANGE (B. Morris)

10:10-10:40am DRAFT TABLE FOR POTENTIAL SUBCATEGORIES (R. Crume)

10:40-10:50am BREAK

10:50-11:10am REGULATORY ALTERNATIVES PAPER GUIDANCE (R. Crume)

11:10-11:40am DEVELOPMENT OF SCHEDULE FOR COMING YEAR (N. Morro

DRAFT AGENDA
INCINERATOR WORK GROUP MEETING
(continued)

12:40-1:40pm SUBTEAM HUDDLES

1:40-2:20pm SUBTEAM STATUS REPORTS AND RECOMMENDED CC
PRESENTATIONS (N. Morrow)

- Subteam 1 (P. Rahill)
- Subteam 2 (B. Morris)

2:20-2:30pm BREAK

2:30-3:30pm SUBTEAM STATUS REPORTS AND RECOMMENDED CC
PRESENTATIONS (continued)

- Subteam 3 (D. Marietta)
- Subteam 4 (A. Roth)
- Subteam 5 (R. Crume)

3:30-3:45pm NEXT IWG MEETING

- Location and Logistics (Facilitator)
- Proposed Agenda (Facilitator)
- Possible Tour of Glaxo Wellcome Incinerators
(R. Crume)

3:45-3:50pm OTHER MEETINGS REMINDER(Facilitator)

- October 28: Research Triangle Park, NC
(tentative)
- November 20: Houston, TX

3:50-4:00pm REVIEW FLASH MINUTES (S. Radomski)

4:00pm CLOSE (R. Crume)

ATTACHMENT 2

Meeting Attenders

Meeting Attenders

NameAffiliation

Beth Berglund	Merck & Co, Inc.
Richard Crume	U.S. EPA/OAQPS
Larry Faith	Shell Development Company
Leslye Fraser	U.S. EPA/OGC
John Huyler	The Keystone Center
Dave Maddox	Stanley Furniture Company
Ruth Mahr	Citizens Concerned About Medical Waste Incineration
David Marrack	Galveston-Houston Assoc. for Smog Prevention
Bob Morris	The Coastal Corporation
Norman Morrow	Exxon Chemical Americas
Bill Perdue	Pulaski Furniture Corporation
Fred Porter	U.S. EPA/OAQPS
Susan Radomski	Eastern Research Group, Inc.
Paul Rahill	Industrial Equipment and Engineering Company
Ed Repa	National Solid Waste Management Association
Kay Rykowski	Stillwater Technologies
Jeff Shumaker	International Paper
Karluss Thomas	Chemical Manufacturers Association
Larry Thompson	Cornell University College of Veterinary Medicine
Tom Tyler	Institute of Scrap Recycling Industries
Dick Van Frank	National Audubon Society
Dale Walter	Industrial Engineering and Equipment Company
Ed Wheless	Los Angeles County Sanitation District
Bill Wiley	Consumat Systems, Inc.
Dana Worcester	Association of Container Reconditioners

ATTACHMENT 3

List of Work Group Nominations

IWG STATUS OF MEMBERSHIP

Nominations Received

- **Wayne Elliott**, *Central Georgia Ancillary Health Services*
- **Ed Repa**, *National Solid Wastes Management Association*
- **Beth Berglund**, *Merck and Company (replacement for Todd Eckert)*
- **Doug Finan**, *Glaxo Welcome (replacement for Sandra Birckhead)*
- **Paul Tucker**, *International Paper (alternate to Jeff Shumaker)*
- **Kay Rykowski**, *Stillwater Technologies (replacement for Joseph Tessitore)*
- **Dana Worcester**, *Association of Container Reconditioners (alternate for Kay Rykowski)*

Removed From Membership List

- **Sandra Birckhead**
- **Joseph Tessitore**
- **Michael Blumenthal** (*moved to Boiler WG*)
- **John Ramsey**

ATTACHMENT 4

Draft Table for Potential Subcategories

POTENTIAL IWG REGULATORY SUBCATEGORIES

Potential Subcategory	Applicable CAA Section(s)* ----- 111 112 129			Status**	ICWI vs. OSW I	Regulatory Development Stage	Next Milestone/ Date
Subteam #1: Pathological, Crematory, and Pharmaceutical Wastes							
Subteam #2: Petroleum, Chemicals, Off-Gas, Soil, Plastics, and Sludge							
Subteam #3: Wood, Wood Products, and Ovens							

<i>Subteam #4: Metals, Rubber, Can burn-Off, and Bottle Burn-Off</i>							
<i>Subteam #5: Small MWCs, Landfill Gas Flares, Agricultural, Concrete, Fiberglass, and Other</i>							

* **Y**es; **N**o; **U**ndetermined; **D**eferred

** **P**riority; **S**hifted to another WG; **N**on-ICCR effort; **D**eferred consideration at this time

ATTACHMENT 5

ICWI/OSWI Category Definition

ICWI AND OSWI CATEGORIES LISTED IN THE
DECEMBER 28, 1994
ADVANCED NOTICE OF PROPOSED RULEMAKING

OSWI CATEGORIES

1. MWC's with plant capacities less than 35 Mg/day
2. Residential incinerators
3. Agricultural waste incinerators
4. Wood waste incinerators
5. Construction and demolition waste incinerators
6. Crematories
7. Contaminated soil treatment facilities

ICWI CATEGORIES

“All other incinerators [excluding large MWCs and MWIs] burning solid waste other than what has been defined above, are probably industrial and commercial waste incinerators [ICWIs].

ATTACHMENT 6

Items on Representative Incinerator Work Group Responsibilities for Planning Purposes

REPRESENTATIVE IWG RESPONSIBILITIES FOR PLANNING PURPOSES

-- not necessarily to be performed in the order presented --

Developing Regulations:

- Review of inventory and emissions databases, including ICR responses
- Identification of subcategories and groupings
- Plan for addressing data gaps, including possible source testing
- Source testing, if required
- Model plants
- Emission levels and floors
- Control options, efficiencies, costs, and cost-effectiveness
- Energy, economics, and environmental impacts
- Full regulatory analysis
- Regulatory development

Other Activities:

- ICWI Regulatory Alternatives Paper (RAP)
 - Draft for IWG review
 - Recommendations presented to CC
 - Revisions based on CC comments
 - (Note: EPA “White Paper” due November 16, 1998)
- Combine/coordinate regulatory steps with boiler/process heater workgroups

ATTACHMENT 7

Subteam 5 Subcategory Table

POTENTIAL IWG REGULATORY SUBCATEGORIES

Subteam #5

Potential Subcategory	Applicable CAA Section(s)*			Status**	ICWI vs. OSWI	Regulatory Development Stage	Next Milestone Date
	111	112	129				
Small MWCs ^{a,b}					OSWI	Identify population.	Identify data needs.
Residential Waste ^{a,c,d}					OSWI	Identify population.	Identify data needs.
Misc. Organic Waste ^{d,e}					OSWI	Identify population.	Identify data needs.
Agricultural Waste ^a					OSWI	Identify population.	Identify data needs.
Construction/ Demolition Waste ^a					OSWI	Identify population.	Determine need for separate subcategory.
Contaminated Soil ^a (non-hazardous)					OSWI	Identify population.	Determine need for separate subcategory.
Landfill Gas Flares					ICWI	Determine appropriateness for and priority within ICCR.	Present recommendation to CC.
Misc. Industrial Waste					ICWI	Identify population.	Identify data needs.
Fiberglass ^f							
Concrete ^f							

* **Y**es; **N**o; **U**ndetermined; **D**eferred

** **P**riority; **N**ot a priority; **S**hifted to another WG; **O**utside scope of ICCR ; **D**eferred consideration at this time

^aDefined OSWI category.

^bMunicipal, commercial, and institutional waste; <35 Mg/day.

^cApartments (where do schools, universities, nursing homes, hotels/motels, etc. fit?)

^dIncluded in the definition of MSW in the large MWC rule.

^eGrocers, restaurants, (meat processing?)

^fRecommend including in the Misc. Industrial Waste subcategory. These units appear to be located at fiberglass and concrete processing facilities.